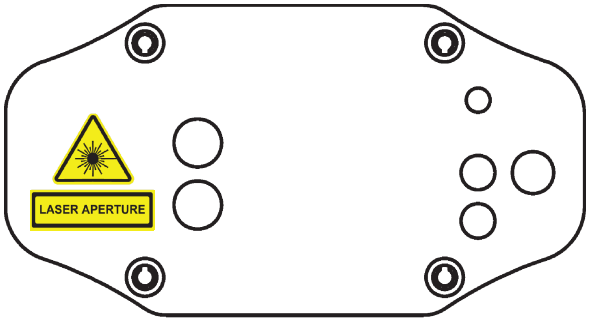
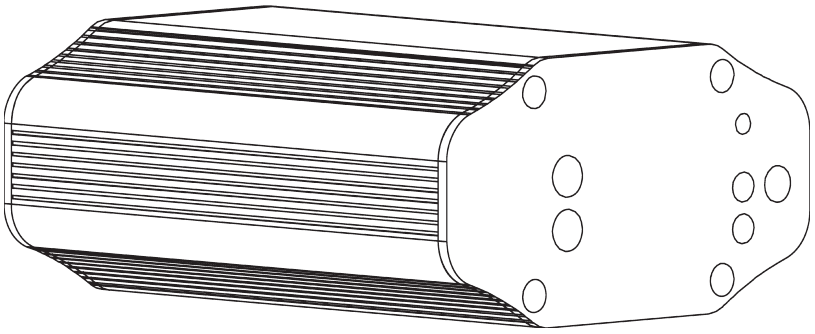
MYN LASER FX

MYN LASER RGX

MYN LASER STAR

User Manual





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Author: Anthony Chiappone
Revision: 01b
Release Date: 12-02-2010

1. BEFORE YOU BEGIN

What is included

- 1 x MiN™ Laser FX/RGX/STAR
- 1 x Flexible Tripod
- 1 x Adjustable Stand
- 1 x Wireless remote
- 1 x Power supply
- 1 x Warranty card
- 1 x User manual

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Manual Conventions

CHAUVET® manuals use the following conventions to differentiate certain types of information from the regular text.

CONVENTION	MEANING
[10]	A DIP switch to be configured
<Menu>	A key to be pressed on the fixture's control panel
1~512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified (for example, showing the operating mode/current status)
MENU > Settings	A sequence of menu options to be followed
ON	A value to be entered or selected

Icons

This manual uses the following icons to indicate information that requires special attention on the part of the user.

ICONS	MEANING
	This paragraph contains critical installation, configuration or operation information. Failure to comply with this information may render the fixture partially or completely inoperative, cause damage to the fixture or cause harm to the user.
	This paragraph contains important installation or configuration information. Failure to comply with this information may prevent the fixture from functioning correctly.
	This paragraph reminds you of useful, although not critical, information.

Safety Instructions

Please read these instructions carefully. It includes important information about the installation, usage and maintenance of this product.

- Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only! To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse source.
- Secure fixture to fastening device using a safety chain.
- Maximum ambient temperature (Ta) is 104° F (40° C). Do not operate fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.
- Never connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Never carry the fixture directly from the cord. Always use the hanging/mounting bracket.
- Avoid direct eye exposure to the light source while it is on.
- Lasers can be hazardous and have unique safety considerations. Permanent eye injury and blindness is possible if lasers are used incorrectly. Pay close attention to each safety REMARK and WARNING statement in the user manual. Read all instructions carefully BEFORE operating this device.

Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser light.

This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.

It is illegal and dangerous to shine this laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into their eyes.

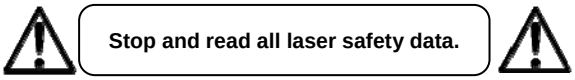
It is a US Federal offense to shine any laser at aircraft.

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact the dealer nearest to you.

Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser light.

Laser Safety and Operating Instructions



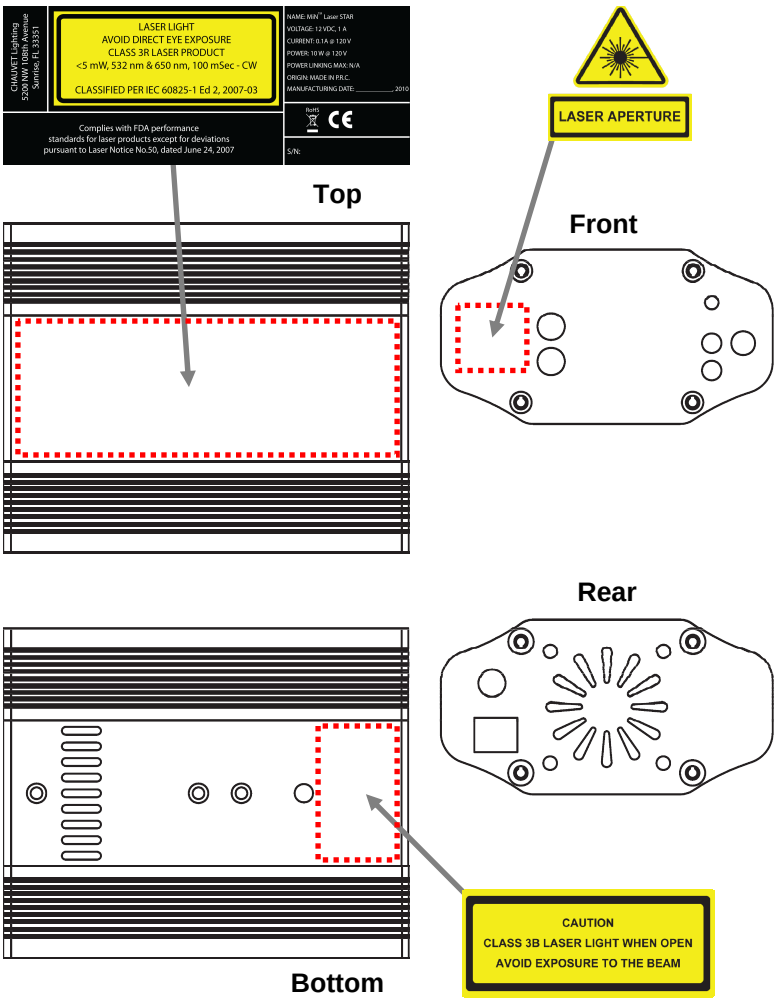
Laser Light is different from any other light sources with which you may be familiar. The light from this product can potentially cause eye injury if not set up and used properly. Laser light is thousands of times more concentrated than light from any other kind of light source. This concentration of light can cause instant eye injuries, primarily by burning the retina (the light sensitive portion at the back of the eye). Even if you cannot feel “heat” from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser light are potentially hazardous even at long distances. Laser eye injuries can happen quicker than you can blink.

It is incorrect to think that because these laser entertainment products split the laser into hundreds of beams that the laser beam is scanned out in high speed, that an individual laser beam is safe for eye exposure. This laser product uses dozens of milliwatts of laser power (Class 3B levels internally) before it splits into multiple beams (Class 3R levels). Many of the individual beams are potentially hazardous to the eyes.

It is also incorrect to assume that because the laser light is moving, it is safe. This is not true. Nor, do the laser beams always move. Since eye injuries can occur instantly, it is critical to prevent the possibility of any direct eye exposure. In the laser safety regulation, it is not legal to aim Class 3R lasers in areas which people can get exposed. This is true even if it is aimed below people’s faces, such as on a dance floor.

- Do not operate the laser without first reading and understanding all safety and technical data in this manual.
- Always set up and install all laser effects so that all laser light is at least 3 meters (9.8 feet) above the floor on which people can stand. See “Proper Usage” section later in this manual.
- After set up, and prior to public use, test laser to ensure proper function. Do not use if any defect is detected. Do not use if laser emits only one or two laser beams rather than dozens/hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels above Class 3R.
- Do not point lasers at people or animals.
- Never look into the laser aperture or laser beams.
- Do not point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.
- Do not point lasers at highly reflective surfaces, such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.
- Never point a laser at aircraft, this is a federal offense.
- Never point un-terminated laser beams into the sky.
- Do not expose the output optic (aperture) to cleaning chemicals.
- Do not use laser if the laser appears to be emitting only one or two beams.
- Do not use the laser if the housing is damaged, open, or if the optics appear damaged in any way.
- Never open the laser housing. The high laser power levels inside of the protective housing can start fires, burn skin and will cause instant eye injury.
- Never leave this device running unattended.
- The operation of a class 3R laser show is only allowed if the show is controlled by a skilled and well-trained operator, familiar with the data included in this manual.
- The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.
- Always use appropriate lighting safety cables when hanging lights and effects overhead.

Laser Safety Label Reproduction


LASER LIGHT
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT
<5 mW, 532 nm & 650 nm, 100 mSec - CW
CLASSIFIED PER IEC 60825-1 Ed 2, 2007-03
Complies with FDA performance
standards for laser products except for deviations
pursuant to Laser Notice No.50, dated June 24, 2007
Top
LASER APERTURE
Front
Rear
CAUTION
CLASS 3B LASER LIGHT WHEN OPEN
AVOID EXPOSURE TO THE BEAM
Bottom

Laser light

Avoid direct eye exposure

Further guidelines and safety programs for safe use of lasers can be found in the ANSI Z136.1 Standard “For Safe Use of Lasers”, available from the Laser Institute of America: www.laserinstitute.org. Many local governments, corporations, agencies, military and others, require all lasers to be used under the guidelines of ANSI Z136.1. Laser Display guidance can be obtained via the International Laser Display Association: www.laserist.org.

Laser Emission Data

Laser Classification	Class 3R (equiv. to US Class IIIa)
Green Laser Medium	DPSS Nd:YVO4, 532 nm
Red Laser Medium	LD GaAlAs, 650 nm
Beam Diameter	<5mm at aperture
Pulse Data	All pulses < 4 Hz (>0.25 sec)
Divergence (each beam)	<2 mrad
Divergence (total light)	<160 degrees
Laser Power of Each Beam from Aperture*	<5 mW

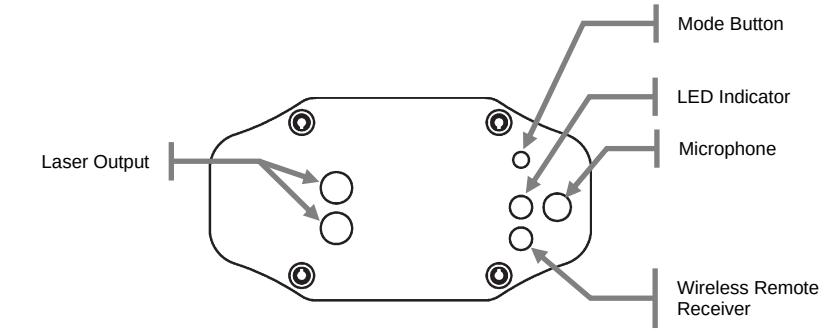
**As measured under IEC measurement conditions for classification.*

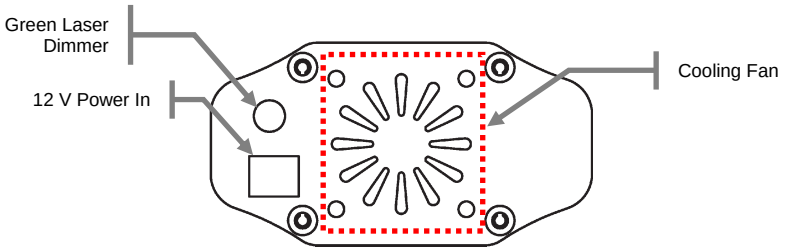
Laser Compliance Statement

This laser product complies with EN/IEC 60825-1 Ed 2, 2007-03, and US FDA/CDRH FLPPS via the terms of Laser Notice No. 50 dated June 24, 2007. This laser device is classified 3R. (Class 3R is the international equivalent of US Class IIIa). No maintenance is required to keep this product in compliance with laser performance standards.

2. INTRODUCTION

Product Overview





3. SETUP

AC Power

This fixture includes an external power supply which is auto-ranging and runs on 100~240 VAC, 50/60 Hz power. Only use the included power supply! To obtain a replacement power supply, contact Chauvet®.

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating indicates its average current draw under normal conditions.

Always connect the fixture to a switched circuit. Never connect the fixture to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used only as a 0 to 100% switch.

Always connect the fixture to a circuit with a suitable electrical ground.

Mounting

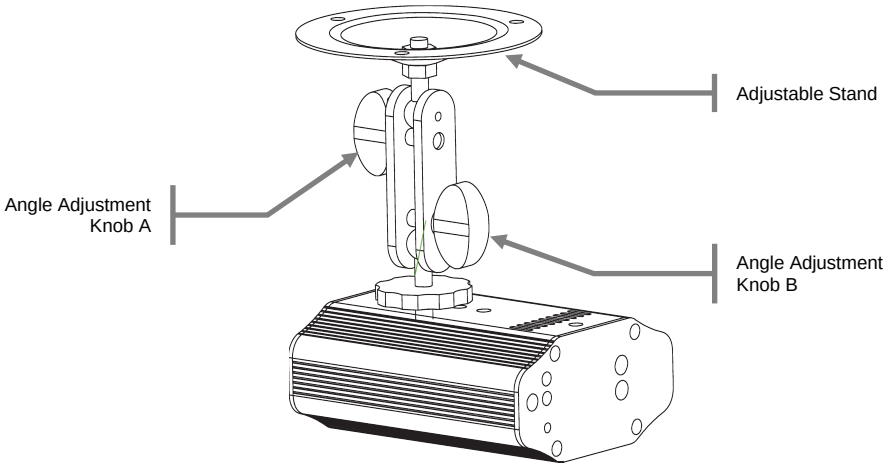
Orientation

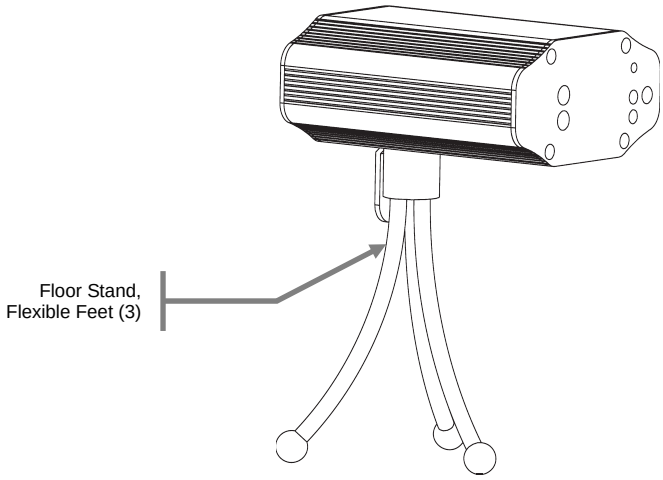
The MiN™ Laser FX/RGX/STAR may be mounted in any position provided there is adequate room for ventilation.

Rigging

Be sure that the structure can support the weight of the fixture. Please see the “Technical Specifications” section of this manual for a detailed weight listing. Mount the fixture securely. Do this with a screw, nut and bolt, or a hanging clamp. When rigging, consider routine maintenance. Please see the following notes on installation.

- When aiming the fixtures, you may use the bracket adjustment knob(s). Loosen the knob(s), adjust to the desired angle, and then tighten the knob(s) by turning clockwise. Do not use tools for this step, as it may cause damage.
- Use the floor stand to support the fixture in a sitting position.





4. OPERATING INSTRUCTIONS

Manual Mode

Access the five different operating modes available in this fixture by using the **<MODE>** button on the front panel.

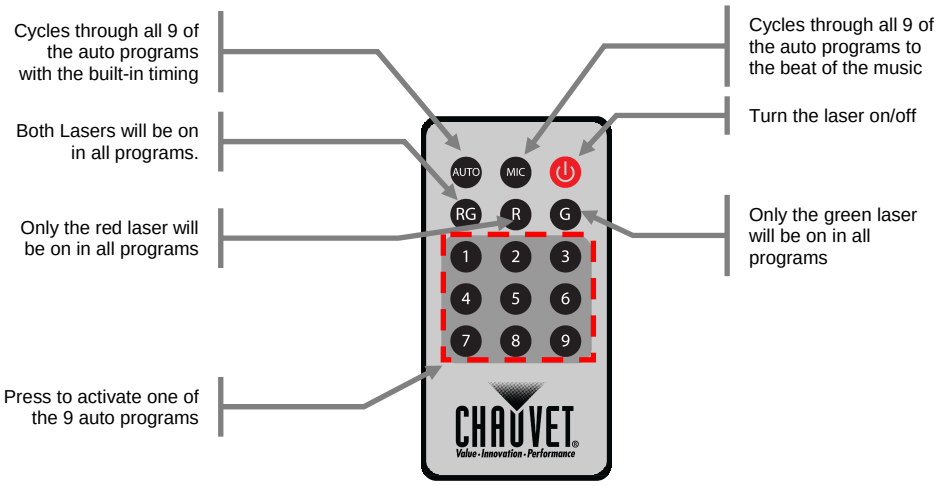
Press **<MODE>** to cycle through the modes. Please see a description of each mode below.

Mode	Description
1	Sound-active A
2	Sound-active B
3	Automatic A (constant rotation-slow)
4	Automatic B (stepping rotation-back and forth)
5	Automatic C (constant rotation-fast)

The LED indicator on the front of the fixture will be green when a sound-active mode is selected.

The LED indicator on the front of the fixture will be red when an automatic mode is selected.

Wireless Remote (IR)



Auto Programs

Auto Program	Description
1	Static Effect (red & green on)
2	Slow rotation (red & green on)
3	Slow rotation (red & green strobing)
4	Medium rotation (red & green on)
5	Medium rotation (red & green strobing)
6	Fast rotation (red & green on)
7	Fast rotation (red & green strobing)
8	Programmed rotation (red & green on)
9	Programmed rotation (red & green strobing)

The wireless Remote (IR) will immediately override the <MODE> button. No additional settings are required!

5. APPENDIX

General Troubleshooting

SYMPTOM	POSSIBLE CAUSE(S)	POSSIBLE ACTION(S)
Breaker/Fuse keeps blowing	• Excessive circuit load	• Check total load placed on the electrical circuit.
	• Short circuit along the power wires	• Check for a short in the electrical wiring (internal and/or external).
Device does not power up	• No power	• Check for power on Mains.
	• Loose power cord	• Check power cord
Fixture is not responding to DMX	• Wrong DMX addressing	• Check Control Panel and unit addressing
	• Damaged DMX cables	• Check DMX cables
	• Wrong polarity settings on the controller	• Check polarity switch settings on the controller
	• Loose DMX cables	• Check cable connections
	• Faulty DMX interface	• Replace DMX input
	• Faulty Main PCB	• Replace Main PCB
Loss of signal	• Non DMX cables	• Use only DMX compatible cables
	• Bouncing signals	• Install terminator as suggested.
	• Long cable / Low level signal	• Install amplifier right after fixture with strong signal.
	• Too many fixtures	• Install an optically coupled DMX splitter after unit #32.
	• Interference from AC wires	• Keep DMX cables separated from power cables or black lights.

If you still have a problem after trying the above solutions, please contact CHAUVET® Technical Support.

General Maintenance

To maintain optimum performance and minimize wear, fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

- Unplug fixture from power.
- Use a vacuum or air compressor and a soft brush to remove dust collected on external vents.
- Clean all lenses when the fixture is cool with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue.
- Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens.
- Gently polish optical surfaces until they are free of haze and lint.

The cleaning of external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates. Damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Clean the external optics at least every 20 days. Clean the fixture at least every 30/60 days.

Always dry the parts carefully after cleaning them.

Never spin a fan using compressed air.

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing; call tags will not be issued. Package must be clearly labeled with a Return Merchandize Authorization Number (RMA #). Products returned without the RMA # will be refused. Call CHAUVET® and request an RMA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to pack fixture properly; any shipping damage resulting from inadequate packaging is the customer's responsibility. As a suggestion, proper UPS packing or double-boxing is always a safe method to use. CHAUVET® reserves the right to use its own discretion to repair or replace product(s).

If you are given an RMA #, please include the following information on a piece of paper inside the box:

1) Your name
2) Your address
3) Your phone number
4) The RMA #
5) ***A brief description of the symptoms***

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore, the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

TECHNICAL SPECIFICATIONS

WEIGHT & DIMENSIONS

Length	4.3 in (111 mm)
Width	3.3 in (85 mm)
Height	1.8 in (45 mm)
Weight	0.7 lbs (0.3 kg)

POWER

Auto-ranging external power supply (included)	100~240 VAC, 50/60 Hz
Power consumption @ 120 V	5 W (<0.1 A) max, 0.1 A inrush
Power consumption @ 230 V	5 W (<0.1 A) max, 0.1 A inrush

LIGHT SOURCE

Type	Laser
Quantity	2 (1 red, 1 green)
Rating (green)	532 nm, 50 mW
Rating (red)	650 nm, 100 mW

PHOTO OPTIC

Coverage angle	100°

INDOOR/OUTDOOR

Rating	For indoor use only

THERMAL

Maximum ambient temperature	104° F (40° C)

CONTROL & PROGRAMMING

Data input	wireless remote (included)

ORDERING INFORMATION

MiN™ Laser FX	MINLASERFX
MiN™ Laser RGX	MINLASERRGX
MiN™ Laser STAR	MINLASERSTAR
Wireless Remote	MiN™ Laser IR

WARRANTY INFORMATION

Warranty (fixture, excluding the laser diodes)	1-year limited warranty
Warranty (laser diodes)	90-day limited warranty

CONTACT US

WORLD WIDE

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